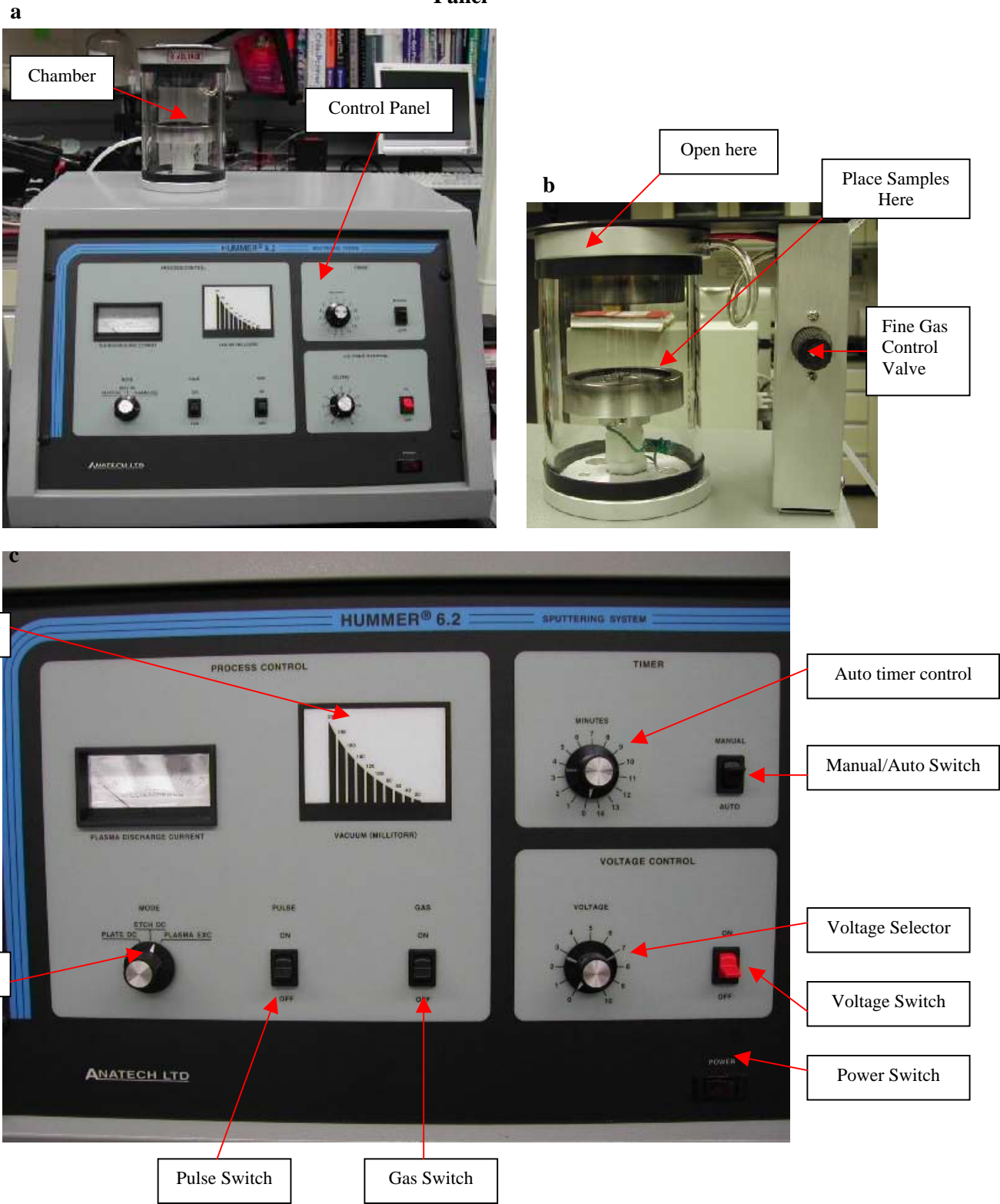


Hummer 6.2 Sputter Coater Etching Mode Operating Instructions:

Note: this does not take the place of reading the manual

Figure 1: Sputtering Chamber and Control Panel



Part 2: Etching Mode

1. Turn off the power to the sputter coater, if necessary.
2. Open the sputtering chamber and install aluminum etch ring if you will be etching for more than 2 minutes.
3. Put your samples on the sample stage, replace the glass, and close the sputter chamber.
4. Set controls to the following:

Control	Setting
Main Power	Off
Voltage Switch	Off
Voltage Selector	0
Gas Switch	Off
Manual/Auto Switch	Manual
Pulse Switch	Off
Mode Switch	Etch

5. Turn on the main power
6. Let the vacuum reach about 30 mtorr
7. Set the regulator on the argon gas tank in the corner of the room to 5-6 psi.
8. Turn the gas switch on, and adjust fine gas control valve until the pressure reaches 40-60 mtorr.
9. Turn Voltage switch on.
10. Adjust fine gas control valve and voltage selector until the chamber conditions are stable at the conditions of your choosing.
11. If you wish to use the automatic timer, set the timer control to the desired time and switch the manual/auto switch to 'auto'.
12. If you wish to use pulse mode, turn the pulse switch on at this time
13. When your etching has finished, follow these shutdown procedures:
 - a. Set voltage selector to 0
 - b. Turn voltage switch off
 - c. Turn gas switch off
 - d. Set the manual/auto switch to manual
 - e. Turn pulse switch off
 - f. Turn main power off
 - g. Allow system to vent to atmosphere
 - h. Remove your samples from the chamber
 - i. Turn off the main process gas valve on the argon tank.
 - j. Clean the chamber with kimwipes and 2-propanol.